REMARKS

Reconsideration of the patentability of the claims of the instant patent application is solicited in view of the above amendments and the following comments.

In the outstanding action, the examiner has rejected all of applicant's claims as being anticipated by the disclosure of the cited JP '243 reference. The examiner has pointed out that the '243 reference discloses a tablet that contains fats or oils, and that the reference has an example in which the fats or oils are exemplified by a Witepsol wax composition. The examiner comments that the tablet of the '243 reference can be made by compression molding. The examiner therefore posits that the composition disclosed by this reference reads on applicant's claims. This assertion by the examiner is respectfully traversed.

In order for a reference to anticipate a later claimed invention, it must disclose each and every material feature of the later claims. That is not the case here. Specifically, applicants' claims have been amended herein to insure that they are not anticipated by the cited Fumiko et al. reference.

It must be noted that applicant's claims describe a solid dosage form that is made up of a plurality of granules containing the active ingredient and the low melting wax (such as Witepsol) as the only excipient. The reference does not disclose a solid composition made up of granules that require an excipient that is only the low melting wax. In fact, **it is essential in the reference that the excipient be a water soluble saccharide**. In the reference, the disclosure is of a solid that is made up of two granular components that have different compositions. One of the granular components is a mixture of fats and oils and excipient; and the other granular component is made up of excipient, but no fats or oils.

While it is not absolutely clear where the active ingredient is in the reference tablet, it is worthy of note that the first granules **have oils and fats and excipient**; while the second granule **has excipient but not fats and oils**. The excipient is a water soluble saccharide/sugar alcohol. It is

not exactly known where the active ingredient is. The reference abstract says that, "The whole tablet is mixed with...a pharmacodynamically effective component...". It is uncertain if this means that the active ingredient is a third component admixed with the first and second granules, or if the abstract has been poorly translated from the original Japanese, and the active ingredient is a part of one and/or the other granule. However, in either case, the critical feature of the granules of the reference is that **both granules require a water soluble saccharide as excipient**. In the instant claims, there is no water soluble saccharide. Note that the instant claimed granule is defined as having an excipient consisting essentially of the defined wax.

It is clear, however, that the reference is intent upon its tablet **coming apart in the oral cavity** of the ingestor and thereby administering the active ingredient in the mouth. That is what the water soluble saccharide is for. It is also clear that the instant invention is intent upon the tablet **not** coming apart in the mouth, but retaining its integrity through the gastrointestinal tract so that the active ingredient is protected from the adverse effects of stomach acids. That is why there is **no** water soluble saccharide in applicant's formulation. Because of these differences in intended use, the solid dosage forms of the reference are constitutionally different from the solid dosage forms claimed herein. Note the use of the transition phrase, "consisting essentially of".

The examiner has contended that the intended use of a claimed composition is not pertinent to the patentability of the claimed composition. That is, of course, true. Merely discovering a new use of a known composition does not make the composition patentable all over again. However, where the claimed compositions have different ultimate uses, the examiner should carefully consider the claimed compositions for critical **compositional** differences with respect to the state of the prior art that enable the intended use to be fulfilled.

In the instant case, there are clear distinctions in the composition being claimed as compared to the composition disclosed in the reference. The reference requires the presence of a water soluble saccharide as the excipient because the tablet is intended to come apart upon dissolution of the water soluble saccharide in the mouth, whereby making the active ingredient available in the mouth. The instant claims require that the excipient be limited to the low melting

wax so that the tablet, etc. will **not** come apart in the mouth, but will stay together until the tablet has passed through the stomach. The compositions are different because the intended use is different. Because the compositions are different, the compositions have different physical properties. New claim 53 expresses these physical properties, which are clearly different from the physical properties of the reference composition.

Further, it is pointed out that the reference requires the presence of two **different** granules in the tablet. One of the granules does not have the fat or oil and the other one does. Both contain water soluble saccharide to enable the whole tablet to break up in the mouth. On the other hand, the instant claimed composition is substantially homogeneous in that all of the granules contain the required low melting wax (which would be comparable to the fats or oils of the reference). Thus, the low melting wax of the instant invention acts as a matrix within which the active ingredient is dispersed. This matrix holds the active ingredient until the tablet reaches a part of the gastro-intestinal tract where the temperature is sufficient to enable the matrix to melt and thereby release the active ingredient. This enables the composition of this invention to provide more active ingredient for the same size tablet, or enables a smaller tablet to give the same amount of active ingredient.

The fact that the active ingredient and the low melting wax are both present in the same granule gives the instant claimed composition its unique properties. The granules of this invention are enabled to sustain the release of the active ingredient over a period of time and over a different portion of the gastrointestinal tract because of the slow melting of the wax which is temperature controlled and because different components of the wax melt at different temperatures. In contrast, the reference water soluble saccharide is leached from the tablet all at the same time, and in the mouth, and the active ingredient is made available at one time and in the mouth. In the instant invention, the wax excipient inhibits and retards drug release, whereas in the reference the saccharide excipient enables drug release.

If the tablet of the instant invention had the structure of the material disclosed in the '243 reference, the behavior of the tablet, particularly the dissolution behavior of the tablet, would be

influenced by the properties and the proportions of ingredients of the granules that do not contain wax. It would have been expected by a person of ordinary skill in this art that tablets containing water soluble excipient components would undergo rapid leaching from the tablet in the presence of gastrointestinal fluids. When the content of these leachable ingredients is above a certain percentage, leaching of these components will cause the tablet to lose its integrity and to disintegrate. Such a tablet would therefore not be capable of providing sustained release of the active component of the tablet over a period of time as is the case of the tablet of the instant invention. Analogizing this behavior of a tablet containing a substantial proportion of water leachable component, to what happens when such a tablet is placed in the mouth, it will be clear that a person of ordinary skill in this art, knowing about the product of the '243 reference, would expect a tablet containing a substantial amount of water leachable components to disintegrate in the mouth before it has an opportunity to pass through the stomach and into the intestines.

Based on this analysis, it is clear that the instant claimed tablet composition, that does not have appreciable water solubility nor has a tendency to disintegrate in the mouth, would not be apparent to an ordinary routineer who has been continually faced with products that are formulated to disintegrate in the mouth. The principle difference between the instant claimed tablet and the products of the prior art is in the formulation that causes the prior art products to disintegrate in the mouth as compared to the formulation of the instant claimed tablet that causes the instant products not to disintegrate in the mouth (to any appreciable extent), but rather to pass through the digestive system until it reaches a place where the wax will slowly melt and therefore slowly release the active ingredient.

It is therefore urged that the examiner reconsider her rejection based on the disclosure of the '243 reference and withdraw the same.

In the outstanding action, the patentability of all of the claims of this application has been rejected based on an anticipation theory over the disclosure of the Douglas et al. '563 reference. The examiner has asserted that the disclosure of the '563 reference anticipates the instant claimed invention because it teaches a composition made by heating and then molding the composition.

Simply put, an anticipation rejection requires that each and every material feature of the claims must be met by a single reference. In this case, there is a significant distinction between the disclosure of the reference and the instant claims. The instant claims are directed to the use of a low melting wax as an excipient. Only Example 15 of the reference discloses a composition with Witepsol (an example of the wax included in the instant claims). In this example, the only disclosure is of molding (not compressing) the composition in a manner that is quite similar to the manner in which suppositories are made.

It is well known in the art that suppositories containing Witepsol are brittle and therefore they are not suited to the instant use because they are not sufficiently robust. The disclosures in this reference of making granules other than by a molding operation, do not disclose the use of Witepsol. There is no disclosure in the reference of making granules of Witepsol and an active ingredient. That is what the instant claims call for. It can be expected that if an orally administrable solid composition, including high amounts of the active ingredient, is prepared by a molding rather than a compression technique, it will not be possible to make a high strength tablet, and such tablets as are made will fracture after preparation. Because of this, such molded suppositories are not suited to oral administration and therefore do not fall within the scope of the instant claims. Therefore, the anticipation rejection cannot be sustained.

Further, it is pointed out that many of applicant's claims call for compression of the tableting composition in order to make the solid dosage form tablet of this invention. This is not disclosed in this reference. For this reason as well, the anticipation rejection cannot be sustained.

In the outstanding action, the examiner has also rejected the patentability of the instant claims as being directed to subject matter that would have been obvious to a person of ordinary skill in this art in view of the disclosures of the cited '243 and '563 references. The position asserted by the examiner is that the '243 reference discloses a tablet containing granules and excipients. This position too is respectfully traversed. The examiner overlooks the clear fact that the required excipient is quite different in the reference than it is in the instant claims. The reference uses a water soluble saccharide that enables the tablet to break up (disintegrate) in the

mouth, and the instant invention uses a low melting wax to keep the tablet together in the mouth and through the stomach.

The examiner has taken the position that the use of the transition phrase, "consisting essentially of..." does not avoid the rejection because the instant specification described the optional use of additional exciptients. This rejection is respectfully traversed. It is to be noted that the additional excipients set forth in this specification do not include things that will enable the claimed solid form tablet to disintegrate in the mouth. The key element here is that the instant tablet stays together and retards release of the active material until the tablet has passed through the stomach and into the intestine, whereas the reference composition is specifically formulated to disintegrate in the mouth.

The extra excipients disclosed in this specification, such as lubricants, glidants, and binders may be included in the claimed composition in small amounts. These materials do not affect the properties of the final dosage form product, nor do they interfere with the solid product not disintegrating in the mouth but retaining its structure through the mouth and stomach into the intestine. It is the purpose of these extra materials to enable the instant invented product to be formed on an industrial scale. These types of materials are routinely added to pharmaceutical compositions in small amounts. They do not enable dissolution of the solid tablet in the mouth. Therefore, the transition phrase, "consisting essentially of" does not exclude them.

As to the rejection of the claims as being obvious in view of the cited '563 reference, it is acknowledged that this reference discloses a solid composition made by molding an active ingredient and a low melting wax. The examiner recognizes that the instant invention does not stop at merely assembling the wax and the active ingredient, but further requires that this solid, orally administrable, composition not release active ingredient in the mouth, but retains the active ingredient until the claimed tablet passes through the stomach and into the intestine. The reference does not disclose a composition that is adapted to accomplishing that.

The '563 reference does not provide any impetus for a person of ordinary skill in the art to select a low melting wax as an excipient and to **compression mold** the combination of the wax and the active ingredient into granules to form a tablet that is both suitable for oral ingestion and passage through the upper portions of gastrointestinal tract and thence into the intestine.

It is pointed out that the instant claimed compositions provide a new and unexpected result in that the presence of the low melting waxes and the absence of any significant amount of water leachable components causes the amount of active ingredient that is absorbed through the intestine wall and into the blood stream to be increased, and at the same time causes the rate of elimination of active material to be reduced. It appears that the low melting waxes act as carriers that enhance drug absorption through the medium of sustained drug release as opposed to releasing all of the active ingredient at one time upon the tablet disintegrating in the mouth.

It is urged that the examiner carefully reconsider her position and withdraw the rejection of the patentability of the claims of this application based on the two applied references of record.

Respectfully submitted,

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